PTO/SB/21 (09-04)

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TRANSMITTAL FORM		Application Number	10/766,638	
		Filing Date	January 28, 2004	
		First Named Inventor	Holmes-Farley et al.	•
		Art Unit	1615	
(to be used for all correspondence after initial fil	ling)	Examiner Name	James M. Spear	
al Number of Pages in This Submission	41	Attorney Docket Number	103.1D1C4	

ENCLOSURES (check all that apply)							
Fee Transmittal Form	☐ Drawing(s)	☐ After Allowance Communication to TC					
Fee Attached	Licensing-related Papers	Appeal Communication to Board of Appeals and Interferences					
Amendment / Reply	Petition	Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)					
After Final	Petition to Convert to a Provisional Application	Proprietary Information					
Affidavits/declaration(s)	Power of Attorney, Revocation Change of Correspondence Address	Status Letter					
Extension of Time Request	Terminal Disclaimer	Other Enclosure(s) (please identify below):					
Express Abandonment Request	Request for Refund	Statement under 37 CFR 3.73(b) and supplemental sheet					
	CD, Number of CD(s)						
Information Disclosure Statement	Landscape Table on CD						
Certified Copy of Priority Document(s)	Remarks						
Reply to Missing Parts/ Incomplete Application							
Reply to Missing Parts							
under 37 CFR1.52 or 1.53							
SIGI	NATURE OF APPLICANT, ATTORNEY	, OR AGENT					
Firm	Genzyme Corporation	· · · · · · · · · · · · · · · · · · ·					
Signature	LINGERS						
Printed Name	Richard D. Allison						
Date	February 15, 2005 Reg. No.	31,584					
	CERTIFICATE OF TRANSMISSION/MAILING						

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature

Typed or printed name nchele Silver

February 15, 2005

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Application Number	10/766,638
Filing Date	January 28, 2004
First Named Inventor	Holmes-Farley et al.
Art Unit	1615
Examiner Name	James M. Spear
Attorney Docket Number	103.1D1C4

I hereby revok	e all previous po	owers of attorney or authoriz	ations of ag	gent given in the	e above-iden	tified application:	
	of Attorney	is submitted herewith.					
OR							
☐ I hereby appoint the practitioners at Customer Number : 24536							
				L			
⊠ Please c	hange the co	orrespondence address	for the a	above-identi	fied applic	ation to:	
	address asso						
Cust	tomer Numb	er:	24	536			
OR				**** ****	<del></del>	-	
⊠ Firm or		Genzyme Corporation	າ		**,		
Individua	I Name			<del></del>			
Address		15 Pleasant Street Co	onnector				
		Legal Department					
City		Framingham	State	MA	ZIP	01701	
Country		US					
Telephone		(617) 252-7500	Fax	(508) 872-	5415		
I am the:						-	
☐ Appli	icant/Invento	or.					
⊠ Assig	gnee of reco	rd of the entire interest.	See 37	CFR 3.71.			
State	ement under	37 CFR 3.73(b) is encl	osed. (Fo	orm PTO/SE	3/96)		
SIGNATURE of Applicant or Assignee of Record							
Signature A 3 (M)							
Name	Richard D. Allison, Managing IP Counsel with Attached Signature Authority						
Date	February 1	5, 2005 Telephone (508) 270-2583					
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.							
Total of forms are submitted.							

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	formation unless it displays a valid OMB control number.
Application Number	10/766,638
Filing Date	January 28,2 004
First Named Inventor	Holmes-Farley et al.
Title	Phosphate-Binding Polymers, Etc.
Art Unit	1615
Examiner Name	James M. Spear
Attorney Docket Number	103.1D1C4

I hereby rev	oke/	all previous powers of attorn	ey giv	en in th	e ab	ove-ide	entified a	oplication.
I hereby appoi	nt:							
☑ Practitioners OR	☑ Practitioners associated with the Customer Number: OR			24536				
☑ Practitioner(:	s) nar	med below:						_
		Name		Registration Number				]
		Richard D. Allison		31,584				
		Isabelle A.S. Blundell			43,	321		1
		Robert J. Cobert			36,	108		
		Thomas J. DesRosier	$\top$		30,	168		1
as my/our attorne Patent and Trade	∍y(s) emar⊦	or agent(s) to prosecute the application of Confice connected therewith.	identifie	d above, a	and to	transact a	all business	in the United States
Please recogniz	e or	change the correspondence address for	the abo	ove-identif	ied app	olication t	o:	
The addres	s ass	sociated with the above-mentioned Custo	omer Nu	ımber				
<i>OR</i> ⊠ The addres	ss as:	sociated with Customer Number: 24	1536	_				
OR								
Firm <i>or</i> Individual Na	Genzyme Corporation							
Address		15 Pleasant Street Connector				*	-	
		Legal Department						
City		Framingham	State	MA		ZIP	01701	<del>-</del>
Country		US		-	_		<u> </u>	
Telephone		(617) 252-7500	Fax	(508) 87	2-5415	;		
I am the:								<del></del>
Applicant/In	ivento	or.						
Assignee of record of the entire interest. See 37 CFR 3.71.								
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)								
		SIGNATURE Of Applica	nt or A	ssignee o	f Reco	ord		
Signature	P	Ladle Cally			Date		February	15, 2005
Name	F	Richard D. Allison		Telepho	one	(508) 27	70-2583	
	Title and Company Managing Intellectual Property Counsel with Attached Signature Authority							
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.								
□ *Total of forms are submitted.								
his collection of information	on is re	equired by 37 CFR 1.31 and 1.33. The information is	required to	o obtain or re	tain a he	enefit by the	public ution in	to file land by the LICETO to

In collection of information is required by 37 CPT 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CPT. 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## POWER OF ATTORNEY and **CORRESPONDENCE ADDRESS INDICATION FORM**

re required to respond to a collection of in	tormation unless it displays a valid OMB control number.
Application Number	10/766,638
Filing Date	January 28,2 004
First Named Inventor	Holmes-Farley et al.
Title	Phosphate-Binding Polymers, Etc.
Art Unit	1615
Examiner Name	James M. Spear
Attorney Docket Number	103.1D1C4

I hereby revoke all previous powers of attorney given in the above-identified application.							
I hereby appoint:			-				
☑ Practitioners associated with the Customer Number: OR			2450	36			
☑ Practitioner(s) named below:							
	Name		Registration Number				
	Deborah A. Dugan		37,315			7	
	Jennifer L. Dupre			41,	722		]
	Madge R. Kanter			35,	211		7
	Elizabeth Lassen			31,	845		7
as my/our attorney(s Patent and Tradema	s) or agent(s) to prosecute the application ark Office connected therewith.	identifie	ed above, a	and to	transact a	all business	in the United States
Please recognize of	or change the correspondence address for	r the abo	ove-identif	ied ap	plication t	o:	
	ssociated with the above-mentioned Custo						
OR  The address associated with Customer Number:  24536  OR							
Firm or Individual Name	T Genzyme Corporation						
Address	15 Pleasant Street Connector						
	Legal Department						
City	Framingham	State	MA		ZIP	01701	
Country	US						
Telephone	(617) 252-7500	Fax	(508) 87	2-5415	5		
I am the:  ☐ Applicant/Inventor.  ☐ Assignee of record of the entire interest. See 37 CFR 3.71.  Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)							
SIGNATURE of Applicant or Assignee of Record							
Signature	CM HOWS			Date		February	15, 2005
Name	Richard D. Allison Telep			Telephone (508) 270-2583			
Title and Company Managing Intellectual Property Counsel with Attached Signature Authority							
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.							
*Total of							
his collection of information is	required by 37 CFR 1.31 and 1.33. The information is	required t	o obtain or re	otain a h	anofit by the	public udials i	- 4- (1- ( 4 t - 1) - 110DTO 4-

this conecution of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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e required to respond to a collection of in	ormation unless it displays a valid OMB control number.
<b>Application Number</b>	10/766,638
Filing Date	January 28,2 004
First Named Inventor	Holmes-Farley et al.
Title	Phosphate-Binding Polymers, Etc.
Art Unit	1615
Examiner Name	James M. Spear
Attorney Docket Number	103.1D1C4

I hereby revo	ke all previous powers of attorne	ey giv	en in th	ne abo	ve-ide	entified ap	plication.
I hereby appoint	:						
☑ Practitioners a OR	ctitioners associated with the Customer Number:						
☑ Practitioner(s)	named below:						_
	Name		Reg	gistratio	n Numb	er	
	Bart G. Newland			31,2	282		
	Jennifer D. Tousignant			54,4	198		
	Y. Philip Zhang			44,3	372		
			-	_			
as my/our attorney Patent and Tradem	(s) or agent(s) to prosecute the application lark Office connected therewith.	identifie	d above, a	and to t	ransact	all business i	n the United States
Please recognize	or change the correspondence address for	the abo	ve-identif	ied app	lication 1	to:	
The address a	associated with the above-mentioned Custo	mer Nu	mber				
OR  The address	associated with Customer Number: 24	536					
OR						J	
Firm <i>or</i> Individual Name	Genzyme Corporation						
Address	15 Pleasant Street Connector						
	Legal Department						
City	Framingham	State	МА		ZIP	01701	
Country	US						
Telephone	(617) 252-7500	Fax	(508) 87	2-5415			-77
I am the:  Applicant/Inventor.  Assignee of record of the entire interest. See 37 CFR 3.71.  Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)							
SIGNATURE of Applicant or Assignee of Record							
Signature	MEREL	····		Date		February 1	5, 2005
Name	Richard D. Allison	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7					,
Title and Company Managing Intellectual Property Counsel with Attached Signature Authority							
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.							
Total of forms are submitted.							

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



**Genzyme Corporation** 500 Kendall Street

Cambridge, MA 02142 Tel.: (617) 252-7500 Fax: (617) 252-7553

#### SIGNATURE AUTHORITY

I, Thomas J. DesRosier, Senior Vice President and General Counsel of Genzyme Corporation hereby appoint Madge R. Kanter, Richard D. Allison, Elizabeth Lassen and Bart G. Newland, all Managing Intellectual Property Counsel of Genzyme Corporation, with full power and authority to transact any and all business before the United States Patent and Trademark Office, and any foreign counterpart patent office, with the powers of a Corporate Officer of Genzyme Corporation.

Date: December 2, 2003

Thomas J. DesRosier, Esq.
Senior Vice President and General Counsel

**GENZYME CORPORATION** 

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STATEMENT UNDER 37 CFR 3.73(b)				
Applicant/Patent Owner: Stephen Randall Holn	nes-Farley et al.			
Application No./Patent No.: 10/766,638	Filed/Issue Date: January 28,2 004			
Entitled: Phosphate-Binding Polymers for Oral	Administration			
Genzyme Corporation	, a Corporation			
(Name of Assignee)	(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)			
states that it is:				
1.   the assignee of the entire right, title	e and interest or			
2. an assignee of less than the entire				
□ °	ts ownership interest is %			
in the patent application/patent identified above	•			
	e patent application/patent identified above. The assignment was Trademark Office at Reel, Frame, or for which a copy			
OR				
B. A chain of title from the inventor(s), of the shown below:	e patent application/patent identified above, to the current assignee as			
	rry W. Mandeveille, III, and George M. Whitesides Itex, Inc.			
The document was recorded in the U	United States Patent and Trademark Office at			
Reel <u>6711</u> , Frame <u>0377</u> , or for which	h a copy thereof is attached.			
2. From: Stephen R. Holmes-Farley, Har	rry Mandeville, III, and George M. Whitesides			
The document was recorded in the I	To: <u>Geltex, Inc.</u> United States Patent and Trademark Office at			
Reel <u>7140</u> , Frame <u>0809</u> , or for which				
3. From: Stephen Randall Holmes-Farley Pharmaceuticals, Inc.	y, Harry W. Mandeville, III and George M. Whitesides To: Geltex			
	United States Patent and Trademark Office at			
Reel <u>7568</u> , Frame <u>0232</u> , or for which	n a copy thereof is attached.			
Additional documents in the chain of	f title are listed on a supplemental sheet.			
Copies of assignments or other documents  [NOTE: A separate copy (i.e., a true copy of Division in accordance with 37 CFR Part 3, i USPTO. See MPEP 302.08]	in the chain of title are attached.  f the original document(s)) must be submitted to Assignment  if the assignment is to be recorded in the records of the			
The undersigned whose (fills is supplied below)	is authorized to act on behalf of the assignee.			
CACKE WITH /	February 15, 2005			
Signature	Date			
Richard D. Allsion	(508) 270-2583			
Printed or Typed Name	Telephone Number			
Hichard D. Aillson, Managing IP Counsel with Attached Signature Authority				

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Title

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STATEMENT UNDER 37 CFR 3.73(b)						
Applicant/Patent Owner: Stephen Randall Holmes-Farley et al.						
Application No./Patent No.: 10/766,638 Filed/Issue Date: January 28,2	004					
Entitled: Phosphate-Binding Polymers for Oral Administration						
Genzyme Corporation , a Corporation						
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, t	niversity, government agency, etc.)					
states that it is:						
<ol> <li>the assignee of the entire right, title, and interest; or</li> </ol>						
2. an assignee of less than the entire right, title, and interest						
The extent (by percentage) of its ownership interest is % in the patent application/patent identified above by virtue of either:						
A. An assignment from the inventor(s) of the patent application/patent identified above. Trecorded in the United States Patent and Trademark Office at Reel, Frame thereof is attached.	The assignment was, or for which a copy					
OR						
B. A chain of title from the inventor(s), of the patent application/patent identified above, to shown below:	o the current assignee as					
<ol> <li>From: Geltex Pharmaceuticals, Inc.         To: Genzyme Corporation         The document was recorded in the United States Patent and Trademark Office a Reel 014022, Frame 0197, or for which a copy thereof is attached.     </li> </ol>	t					
2. From: To:						
The document was recorded in the United States Patent and Trademark Office a	t ,					
Reel, Frame, or for which a copy thereof is attached.						
3. From: To:						
The document was recorded in the United States Patent and Trademark Office a	t					
Reel, Frame, or for which a copy thereof is attached.						
☐ Additional documents in the chain of title are listed on a supplemental sheet.						
☐ Copies of assignments or other documents in the chain of title are attached.						
[NOTE: A separate copy (i.e., a true copy of the original document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08						
The undersigned (whose title is supplied below) is authorized to act on behalf of the assigned	э.					
February 15, 2	2005					
Signature Date						
Richard D. Allsion (508) 270-28	583					
Printed or Typed Name Telephone Nu						
Richard D. Allison, Managing IP Counsel with Attached Signature Authority						

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

SUPPLEMENTAL SHEET

DATE: 11/02/93



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

PAUL T. CLARK, ESQ. FISH & RICHARDSON 225 FRANKLIN STREET BOSTON, MA 02110-2804

TO:

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231

ASSIGNOR:

HOLMES-FARLEY, STEPHEN R.

**ASSIGNOR:** 

MANDEVILLE, W. HARRY, III

ASSIGNOR:

WHITESIDES, GEORGE M.

DOC DATE: 09/21/93

DOC DATE: 09/10/93

DOC DATE: 09/10/93

RECORDATION DATE: 10/04/93 NUMBER OF PAGES 003 REEL/FRAME 6711/0377

DIGEST: ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:

GELTEX, INC.

128 SPRING STREET

LEXINGTON, MASSACHUSETTS 02173

SERIAL NUMBER

8-105591

08/11/93 FILING DATE ISSUE DATE 00/00/00

PATENT NUMBER

ASSIGNMENT BRANCH

ASSIGNMENT/CERTIFICATION SERVICES DIVISION

\* Mo Docketing Required \* Practice Systems Reviewed By Initials: Reviewed By Billing Secretary,

#### **ASSIGNMENT**

For valuable consideration, we, Stephen Randall Holmes-Farley of Arlington, Massachusetts; W. Harry Mandeville, III, of Lynnfield, Massachusetts; and George McClelland Whitesides of Newton, Massachusetts hereby assign to Geltex, Inc., a Delaware corporation having a place of business at Lexington, Massachusetts, and its successors and assigns (collectively hereinafter -called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent No. 08/105,591 filed August . 11, 1993, entitled PHOSPHATE-BINDING POLYMERS FOR ORAL ADMINISTRATION this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at Waltham, Mass.
this 10th day of September, 1993 Stephen Randoll Admer-John L.S
STEPHEN RANDALL HOLMES-FARLEY
STATE OF Massachusett 5:ss.
COUNTY OF Modelles ex:
Before me this 10 <sup>th</sup> day of September 19 <sup>93</sup> personally appeared Stephen and all Holms-Farley known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.  Due Byokman Notary Public
My Commission Expires:

DOREEN M. BJORKMAN NOTARY PUBLIC My commission exp. Sept. 30, 1999

[Notary's Seal Here]

MEL 6 / 1 | HAME 3 7 E

IN WITNESS WHEREOF, I I	neret et my hand and seal a	it WALT, 1	MA	
this 10 day of SE	77. , 19 <u>93</u>			
·	Why Ml	T		_ L.S.
	W. HARRY MAN	DEVILLE, III	•	
CTATE OF MASSACHUSE	<u>TTS</u> : :SS.			
COUNTY OF MIDDLESEX	·:			
Before me the Mandeville knowled therein contained.	own to me to be the person ged that he executed the same	whose name is subscribe as his free act and	ibed to the foregoing	g
	Notary Public O	)		æ
	My Commission Expires:			REFL 67
[Notary's Seal Here]	DOREEN M. BJORKMAN NOTARY PUBLIC My commission exp. Sept. 30, 1999	· ·		- FRAME 3
	<i>,</i> ·			79
IN WITNESS WHEREOF, I	nereto set my hand and seal a	at Cambode	2 MA	
this day of	1973 BULCHand GEORGE MCCLELI	AND WHITESIDES	3	_ L.S.
STATE OF Massachuse COUNTY OF Middlesey	<u>tto</u> : :ss. o:			
Before me this 2/at day of kept, 1993, personally appeared known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.				
	Susan J. Bothfuss Notary Public		· · · · · · · · · · · · · · · · · · ·	
	My Commission Expires: &	-27-98		
[Notary's Seal Here]			OCT -4 93	
		PATEN	URCEU FAND TRACEMARK OFFICE	•





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UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

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DOROTHY P. WHELAN FISH & RICHARDSON 225 FRANKLIN STREET BOSTON, MA 02110-2804

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BOSTON, MA

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT.

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231

**ASSIGNOR:** 

TO:

DOC DATE: 06/09/94

HOLMES-FARLEY, STEPHEN R.

ASSIGNOR:

DOC DATE: 06/09/94

MANDEVILLE, HARRY, III

ASSIGNOR:

DOC DATE: 08/05/94

WHITESIDES, GEORGE M.

RECORDATION DATE: 08/30/94 NUMBER OF PAGES 003 REEL/FRAME 7140/0809

DIGEST: ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:

GELTEX INC.

303 BEAR HILL ROAD WALTHAM, MA 02154

SERIAL NUMBER

8-238458

05/05/94 FILING DATE

PATENT NUMBER

ISSUE DATE 00/00/00

EXAMINER/PARALEGAL

ASSIGNMENT BRANCH

ASSIGNMENT/CERTIFICATION SERVICES DIVISION

\* No Docketing Required \* Reviewed By Practice Systems Initials:

Reviewed By Billing Secretary

Initials:\_

In Witness Whereof,	, I here. set my hand and s	seal at Wal. 2m	MA.
this $9$ day of $$	une 1994	1	
	JAMA	7	L.S.
Firs	st Middle Initial	Last	
<b>W.</b>	/ Harry Mar	ndeville, III	
STATE OF MASSACHU	<u>ISETTS</u> : :ss.		
COUNTY OF MIDDLE			
Mandeville III	known to me to be the per	Tune, $19\frac{94}{4}$ , personal rson whose name is subscribe same as his free act and decomposition.	d to the foregoing
· .	Notary Public Son!	ma	
[Notary's Seal Here]	My Commission Expires	DOREEN M. BJORKMAN NOTARY PUBLIC My commission exp. Sept. 30, 1999	•
this day of Fire	Jago in with	Last Whitesides	Ma,
STATE OF MASSOCK COUNTY OF Medical	usetls:::ss. desep::		•
Lous Whiterdes	known to me to be the per	rson whose name is subscribe same as his free act and dec	d to the foregoing
	Notary Public	ng as	
	My Commission Expires	PATENT AND TRADE	) ·
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and the second s	In Boundarion Expires May 11, 2	AUG 30 1994	∞ —
4;	•	- 20 1994	

#### **ASSIGNMENT**

For valuable consideration, we, Stephen Randall Holmes-Farley, of Arlington, MA; W. Harry Mandeville, III of Lynnfield, MA; George McClelland Whitesides of Newton, MA; hereby assign to Geltex Inc., a Massachusetts corporation having a place of business at 128 Spring Street, Lexington, MA 02173, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent entitled PHOSPHATE-BINDING POLYMERS FOR ORAL

#### **ADMINISTRATION**

this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at	_,
this 9th day of June, 1994  First Middle Initial Last Stephen Randall Holmes-Farley	<b>}.</b>
STATE OF <u>MASSACHUSETTS</u> :	
:SS. COUNTY OF <u>MIDDLESEX</u> :	
Before me this	<u>r</u>
therein contained.	
Notary Public O	

My Commission Expires:

NOTARY PUBLIC
My commission exp. Sept. 30, 1999

[Notary's Seal Here]

# 40 -58/ CORDATION FORM COVER SH.

<u></u>	PAIEN	IS UNLI
Con	nmissioner of Patents and Trademarks: Please record t	the attached original document.
	Name of conveying party(ies)  Stephen R. Holmes-Farley, Harry Mandeville, III George M. Whitesides	2. Name and address of receiving party(ies): Geltex Inc. 303 Bear Hill Road Waltham, MA 02154
	Additional name(s) attached?	Additional names/addresses attache ☐ Yes ■ No
<b>3.</b> )	Nature of conveyance:  ☐ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other:	CEIVED OF PRISONED
	Execution Date: 6/9/94	SEP 0 7 1994
9	Application number(s) or patent number(s): If this document is being filed with a new application, to A. Patent Application No.(s): 08/238,458	B. Patent No.(s):
	Additional numbers	attached? ☐ Yes ■ No
<b>(5.</b> )	Name/address of party to whom correspondence concerning document should be mailed:  Dorothy P. Whelan Fish & Richardson 225 Franklin Street	Total number of applications/patents involved: 1  Total fee (37 CFR 3.41): \$40  Enclosed  Authorized to charge deposit account
	Boston, MA 02110-2804	8. Deposit account number: <b>06-1050</b> If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
	DO NOT US	E THIS SPACE
	Dorothy P. Whelan Name of Person Signing  Name of Person Signing	pare and belief, the foregoing information is true and correct





UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

DECEMBER 09, 1995

**PTAS** 

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

ATTN: DAVID E. BROOK, ESQ.

TWO MILITIA DRIVE LEXINGTON, MA 02173



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RECORDATION DATE: 07/31/1995

REEL/FRAME: 7568/0232

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

**ASSIGNOR:** 

HOLMES-FARLEY, STEPHEN RANDALL

DOC DATE: 07/13/1995

ASSIGNOR:

MANDEVILLE, W. HARRY, III

DOC DATE: 07/13/1995

ASSIGNOR:

WHITESIDES, GEORGE M.

DOC DATE: 07/14/1995

ASSIGNEE:

GELTEX PHARMACEUTICALS, INC. 303 BEAR HILL ROAD WALTHAM, MASSACHUSETTS 02154

SERIAL NUMBER: 08471747

PATENT NUMBER:

FILING DATE: 06/06/1995

ISSUE DATE:

SEDLEY PYNE, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

FORM PTO-1595 (Rev. 6-93) 20 (Sep. 4-94) 5 (Page 14-94) 5 (Page 14	08-21-1995	Patent and Trademark Office  Y  U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office  GTX9(4/01A7)	
To the Honorable Commissions	100046762	the attached original documents or copy thereof.	
1. Name of conveying party(ies):  Stephen Randall Holmes-Farle W. Harry Mandeville, III George M. Whitesides  Additional name(s) of conveying party(ies) attached	y FEB 1 7 2005 12	Name and address of receiving party(ies)     Name: GelTex Pharmaceuticals, Inc.     Internal Address:	
3. Nature of conveyance:			
<b>☼</b> Assignment	☐ Merger	Street Address: 303 Bear Hill Road	
☐ Security Agreement	☐ Change of Name		
□ Other		City: Waltham State: MA ZIP: 02154	
Execution Date: 1&2 7/13/95; 3-7/1	.4/95	Additional name(s) & address(es) attached?   Yes XX No	
4. Application number(s) or patent number	er(s):	•	
If this document is being filed together	with a new application, t	the execution date of the application is:	
A. Patent Application No.(s)	1	B. Patent No.(s)	
08/471,747			
Additional numbers attached? ☐ Yes X No			
Name and address of party to whom concerning document should be mailed	•	6. Total number of applications and patents involved:	
Name: David E. Brook, Esq.		7. Total fee (37 CFR 3.41)\$ 40.00	
Internal Address: Hamilton, Broo	ok,	D Enclosed	
Smith & Reynol	ds, P.C.	☐ Authorized to be charged to deposit account	
Street Address: Two Militia Dri	ve	8. Deposit account number:	
City: Lexington State: MA	ZIP: 02173	(Attach duplicate copy of this page if paying by deposit account)	
080 TL 08/14/95 08471747	DO NOT USE THE		
Carolyn S Elmore	ade	on is true and correct and any attached copy is a true copy of $\frac{7}{37/95}$	
Name of Person Signing  Total n		gnature / Date er sheet, attachments, and document:	

**Joint** 

#### **ASSIGNMENT**

WHEREAS, we, Stephen Randall Holmes-Farley, W. Harry Mandeville, III and George M. Whitesides have invented a certain improvement in PHOSPHATE-BINDING POLYMERS FOR ORAL ADMINISTRATION described in an application for Letters Patent of the United States, Serial No. 08/471,747, filed June 6, 1995.

WHEREAS, GelTex Pharmaceuticals, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 303 Bear Hill Road, Waltham, Massachusetts 02154, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of the said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution

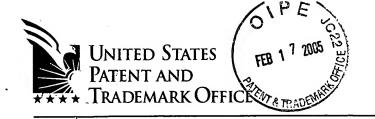
of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

Inventor Stephen Randall Holmes-Farley
Stephen Randall Holmes-Farley / ' Address 20 Norfolk Road,
Arlington, Massachusetts 02174
Witness Atuy Wilson Date 7/13/95
Address 1617 Mass Ne #3
Combridge MA 02138
Witness Su Bull Sur Bodenrader Date 7/13/95
Address 25 Allen Street
Inventor 10 M 11 Date 7/13/55  W. Harry Mandeville, III
W. Harry Mandeville, III
Address 7 Pillings Pond Road
Lynnfield, Massachusetts 01940
Witness Commy Witness Date 7/13/95
Address 1617 M255 Ave #3
Witness Such Suc Bodenrader Date 7/13/95
Address 25 Allen Street
Arlington, MA 02174

Inventor Remure Date 7/14/95
George M. Whitesides
Address 124 Grasmere Street  Newton, Massachusetts 02158
Witness Amy Wilson Date 7/14/95
Address 1617 WASS AVE #3
Cambridge MA 02138
Witness Date 7/14/95
Address 25 Allen Street Arlington UA 02174

GTX941A2.ASG/CSE23



OCTOBER 06, 2003

PTAS

HAMILTON BROOK SMITH, ET AL. ALICE O. CARROLL, ESQ. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133

Chief Financial Officer and Chief Administrative Officer Washington, DC 20231 www.uspto.gov



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RECORDATION DATE: 05/05/2003

REEL/FRAME: 014022/0197

NUMBER OF PAGES: 11

BRIEF: MERGER (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GELTEX PHARMACEUTICALS, INC.

DOC DATE: 03/27/2003

ASSIGNEE:

GENZYME CORPORATION ONE KENDALL SQUARE CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 09655998 PATENT NUMBER: 6605270

FILING DATE: 09/06/2000 ISSUE DATE: 08/12/2003

SERIAL NUMBER: 09708828 PATENT NUMBER:

FILING DATE: 11/08/2000

ISSUE DATE:

SERIAL NUMBER: 10322904

FILING DATE: 12/17/2002

PATENT NUMBER:

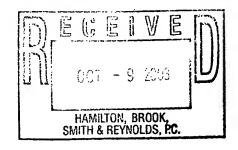
ISSUE DATE:

SERIAL NUMBER: 10264350

FILING DATE: 10/03/2002

PATENT NUMBER:

ISSUE DATE:



SERIAL NUMBER: PATENT NUMBER:	6593366	FILING DATE: 02/21/2002 ISSUE DATE: 07/15/2003
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 11/22/2000 ISSUE DATE:
SERIAL NUMBER: PATENT NUMBER:		
SERIAL NUMBER: PATENT NUMBER:	10307151	FILING DATE: 11/27/2002 ISSUE DATE:
SERIAL NUMBER: PATENT NUMBER:	09714327 6572850	FILING DATE: 11/16/2000 ISSUE DATE: 06/03/2003
SERIAL NUMBER: PATENT NUMBER:	09714541 6558657	FILING DATE: 06/03/2003 FILING DATE: 11/16/2000 ISSUE DATE: 05/06/2003
SERIAL NUMBER: PATENT NUMBER:	09891720	FILING DATE: 06/26/2001 ISSUE DATE: 05/20/2003
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 12/19/2002 ISSUE DATE:
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 04/05/1999 ISSUE DATE: 08/26/2003
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 11/05/1997 ISSUE DATE:
SERIAL NUMBER: PATENT NUMBER:	10158207	FILING DATE: 05/29/2002 ISSUE DATE:
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PATENT NUMBER:	10187316	ISSUE DATE.
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SERIAL NUMBER: PATENT NUMBER:	10125684	FILING DATE: 04/17/2002 ISSUE DATE:
	10125793	
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SERIAL NUMBER: PATENT NUMBER:	10125701	FILING DATE: 04/17/2002 ISSUE DATE:
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SERIAL NUMBER: PATENT NUMBER:	10187315	FILING DATE: 06/27/2002 ISSUE DATE:
SERIAL NUMBER: PATENT NUMBER:	10374014	FILING DATE: 02/25/2003 ISSUE DATE:
SERIAL NUMBER: PATENT NUMBER:	10359458	FILING DATE: 02/05/2003 ISSUE DATE:
SERIAL NUMBER: PATENT NUMBER:	080655 <u>4</u> 6 5487888	FILING DATE: 05/20/1993 ISSUE DATE: 01/30/1996
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 12/06/1995 ISSUE DATE: 12/30/1997
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 06/10/1994 ISSUE DATE: 04/29/1997
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 06/07/1995 ISSUE DATE: 12/30/1997
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 10/28/1997 ISSUE DATE: 11/24/1998

SERIAL NUMBER: PATENT NUMBER:	09191868 6060517	FILING DATE: 11/12/1998 ISSUE DATE: 05/09/2000
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SERIAL NUMBER: PATENT NUMBER:	08471747 5667775	FILING DATE: 06/06/1995 ISSUE DATE: 09/16/1997
SERIAL NUMBER: PATENT NUMBER:	08929784 6083495	FILING DATE: 09/15/1997 ISSUE DATE: 07/04/2000
SERIAL NUMBER: PATENT NUMBER:	09542329 6509013	FILING DATE: 04/04/2000 ISSUE DATE: 01/21/2003
SERIAL NUMBER: PATENT NUMBER:	08460980 5679717	FILING DATE: 06/05/1995 ISSUE DATE: 10/21/1997
SERIAL NUMBER: PATENT NUMBER:	08460980 5679717 09288357 5981693	FILING DATE: 04/08/1999 ISSUE DATE: 11/09/1999
SERIAL NUMBER: PATENT NUMBER:	09129286 5917007	FILING DATE: 08/05/1998 ISSUE DATE: 06/29/1999
SERIAL NUMBER: PATENT NUMBER:	09388876 6066678	FILING DATE: 09/02/1999 ISSUE DATE: 05/23/2000
SERIAL NUMBER: PATENT NUMBER:	08461298 5693675	FILING DATE: 06/05/1995 ISSUE DATE: 12/02/1997
SERIAL NUMBER: PATENT NUMBER:	09532984 6225355	FILING DATE: 03/22/2000 ISSUE DATE: 05/01/2001
PATENT NUMBER:	6433026	ISSUE DATE: 03/09/2001
SERIAL NUMBER: PATENT NUMBER:	08 <b>4</b> 71769 5607669	
SERIAL NUMBER: PATENT NUMBER:	08779779 5919832	FILING DATE: 01/07/1997 ISSUE DATE: 07/06/1999
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 06/06/1995 ISSUE DATE: 04/08/1997
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 06/06/1996 ISSUE DATE: 05/04/1999
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 11/03/1998 ISSUE DATE: 10/19/1999
SERIAL NUMBER: PATENT NUMBER:		FILING DATE: 06/24/1996 ISSUE DATE: 03/07/2000

SERIAL PATENT	NUMBER:	09493639 6395777	FILING DATE: 01/28/2000 ISSUE DATE: 05/28/2002
SERIAL PATENT	NUMBER:	09493639 6395777 08826197 5925379	FILING DATE: 03/27/1997 ISSUE DATE: 07/20/1999
SERIAL	NUMBER:	08999351	FILING DATE: 12/29/1997
SERIAL PATENT	NUMBER:	09166453 6264937	FILING DATE: 10/05/1998 ISSUE DATE: 07/24/2001
PEKTYP	MOMBEK:	6299868	ISSUE DATE: 10/09/2001
		09166510 6267952	FILING DATE: 10/05/1998 ISSUE DATE: 07/31/2001
SERIAL PATENT	NUMBER: NUMBER:	09226585 6352692	FILING DATE: 01/06/1999 ISSUE DATE: 03/05/2002
SERIAL PATENT	NUMBER: NUMBER:	09226585 6352692 08999029 5929184	FILING DATE: 12/29/1997 ISSUE DATE: 07/27/1999
SERIAL PATENT	NUMBER: NUMBER:	08964956 5985938	FILING DATE: 11/05/1997 ISSUE DATE: 11/16/1999
SERIAL PATENT	NUMBER:	09359226 6177478	FILING DATE: 07/22/1999 ISSUE DATE: 01/23/2001
SERIAL	NUMBER:	09668874 6281252	FILING DATE: 09/25/2000 ISSUE DATE: 08/28/2001
			FILING DATE: 09/19/1997 ISSUE DATE: 12/28/1999
		09597343	FILING DATE: 06/19/2000
		08777408 6203785	FILING DATE: 12/30/1996 ISSUE DATE: 03/20/2001
	NUMBER:	09568825 6482402	FILING DATE: 05/11/2000 ISSUE DATE: 11/19/2002
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		09203319 6271264	FILING DATE: 12/01/1998 ISSUE DATE: 08/07/2001
		08979096 6423754	FILING DATE: 11/26/1997 ISSUE DATE: 07/23/2002

SERIAL NUMBER: 08964536 FILING DATE: 11/05/1997 PATENT NUMBER: 6083497 ISSUE DATE: 07/04/2000 SERIAL NUMBER: 09311402 FILING DATE: 05/13/1999 ISSUE DATE: 07/24/2001 PATENT NUMBER: 6264938 FILING DATE: 05/13/1999 SERIAL NUMBER: 09311103 ISSUE DATE: 04/02/2002 PATENT NUMBER: 6365186 SERIAL NUMBER: 09521975 FILING DATE: 03/09/2000 ISSUE DATE: 06/19/2001 PATENT NUMBER: 6248318 SERIAL NUMBER: 09165386 FILING DATE: 10/02/1998 PATENT NUMBER: 6294163 ISSUE DATE: 09/25/2001 FILING DATE: 04/03/2000 SERIAL NUMBER: 09541268 ISSUE DATE: 08/07/2001 PATENT NUMBER: 6270755 SERIAL NUMBER: 09569276 FILING DATE: 05/11/2000 ISSUE DATE: 09/18/2001 PATENT NUMBER: 6290946 SERIAL NUMBER: 09878843 FILING DATE: 06/11/2001 PATENT NUMBER: 6419914 ISSUE DATE: 07/16/2002 FILING DATE: 11/15/2000 SERIAL NUMBER: 09713784 ISSUE DATE: 02/11/2003 PATENT NUMBER: 6517825 FILING DATE: 11/28/2000 SERIAL NUMBER: 09723596 ISSUE DATE: 02/11/2003 PATENT NUMBER: 6517826 SERIAL NUMBER: 09901206 FILING DATE: 07/09/2001 PATENT NUMBER: 6517827 ISSUE DATE: 02/11/2003

ANTIONE ROYALL, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

Alice O. Carroll

Name of Person Signing

MWU 33542 A

Signature

April 14, 2003

Total number of pages including cover sheet, attachments, and document:

- [11]

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#### U.S. PATENTS Schedule A

Application Number	Patent Number	Application Date	Issue Date	Docket Number and Client Reference No.		
08/065,546	5,487,888	20MY1993	30JA1996	1932.1002-000 05329/003001		
08/567,933	5,702,696	06DE1995	30DE1997	1932.1002-004 1011 US		
08/258,477	5,624,963	10JE1994	29AP1997	1932.1003-004 05328/013001		
08/482,969	5,703,188	07JE1995	30DE1997	1932.1003-016 05328/013001		
08/959,471	5,840,766	28OC1997	24NO1998	1932.1003-017 1022 US D1		
09/191,868	6,060,517	12NO1998	09MY2000	1932.1003-018 1022D1C1 US		
08/238,458	5,496,545 05MY1994 05MR1996		05MR1996	1932.1004-001 1031 US		
08/471,747	5,667,775	667,775 06JE1995 16SE1997		1932.1004-012 1032 US		
08/929,784	6,083,495	15SE1997	04JL2000	1932.1004-024 1032D1 US		
09/542,329	6,509,013	04AP2000	21JA2003	1932.1004-035 1036 US		
08/460,980	5,679,717	05JE1995	21OC1997	1932.1005-002 1041 US		
09/288,357	5,981,693	08AP1999	09NO1999	1932.1005-032 1041D1C2 US		
09/129,286	5,917,007	05AU1998	29JE1999	1932.1005-034 1041D1C1 US		
09/388,876	6,066,678	02SE1999	23MY2000	1932.1005-035 1041D1C3 US		
08/461,298	5,693,675	05JE1995	02DE1997	1932.1005-036 1043 US		
09/532,984	6,225,355	22MR2000	01MY2001	1932.1005-037 1041D1C4 US		

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Application Number	Patent Number	Application Date	Issue Date	Docket Number and Client Reference No.		
09/803,647	6,433,026	09MR2001	13AU2002	1932.1005-039		
08/471,769	5,607,669	06JE1995	04MR1997	1932.1007-001 1061 US		
08/779,779	5,919,832	07JA1997	06Л1999	1932.1007-002 1061D1 US		
08/469,659	5,618,530	06JE1995	08AP1997	1932.1007-003 1062 US		
08/659,264	5,900,475	06JE1996	04MY1999	1932.1007-004 1063 US		
09/185,157	5,969,090	03NO1998	19OC1999	1932.1007-018 1063C1 US		
08/670,764	6,034,129	24JE1996	07MR2000	1932.1019-000 1180 US		
09/493,639	6,395,777	28JA2000	28MY2002	1932.1019-013 1180C2 US		
08/826,197	5,925,379	27MR1997	20JL1999	1932.1021-000 1200 US		
08/999,351	6,129,910	29DE1997	10OC2000	1932.1028-002		
09/166,453	6,264,937	05OC1998	24JL2001	1932.1030-001 1291 US		
09/353,329	6,299,868	14JL1999	09OC2001	1932.1030-004 1292 US		
09/166,510	6,267,952	05OC1998	31JL2001	1932.1031-001 1301 US		
09/226,585	6,352,692	06JA1999	05MR2002	1932.1031-002 1302 US		
08/999,029	5,929,184	29DE1997	27JL1999	1932.1032-001 1310 US		
08/964,956	5,985,938	05NO1997	16NO1999	1932.1033-000 1320 US		
09/359,226	6,177,478	22JL1999	23JA2001	1932.1033-010 1320 US C1		
09/668,874	6,281,252	25SE2000	28AU2001	1932.1033-013 1321C2 US		

Application Number	Patent Number	Application Date	Issue Date	Docket Number and Client Reference No.		
08/934,495	6,007,803	19SE1997	28DE1999	1932.1037-000 1360 US		
09/597,343	6,290,947	19JE2000	18SE2001	1932.1037-013 1361 US		
08/777,408	6,203,785	30DE1996	20MR2001	1932.1041-000 1400 US		
09/568,825	6,482,402	11MY2000	19NO2002	1932.1046-001 1451 US		
09/298,350	6,190,649	23AP1999	20FE2001	1932.1049-000 150		
09/203,319	6,271,264	01DE1998	07AU2001	1932.1051-000 1520		
08/979,096	8/979,096 6,423,754		23JL2002	1932.1062-002 1631 IN		
08/964,536	6,083,497	05NO1997	04JL2000	1932.1064-000 1650 US		
09/311,402	6,264,938	13MY1999	24JL2001	1932.1064-010 1651 US		
09/311,103	6,365,186	13MY1999	02AP2002	1932.1064-013 1652 US		
09/521,975	6,248,318	09MR2000	19JE2001	1932.1064-016 1652 US		
09/165,386	6,294,163	02OC1998	25SE2001	1932.1067-000 1680 US		
09/541,268	6,270,755	03AP2000	07AU2001	1932.1102-001 2031		
09/569,276	6,290,946	11MY2000	18SE2001	1932.1102-008 203.2 US		
09/878,843	6,419,914	11JE2001	16JL2002	1932.1102-011 203.2		
09/713,784	6,517,825	15NO2000	11FE2003	1932.1049-003 1501		
09/723,596	6,517,826	28NO2000	11FE2003	1932.1102-010 203.1 US D1		

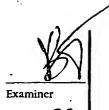
Application Number	Patent Number	Application Date	Issue Date	Docket Number and Client Reference No.	
09/901,206	6,517,827	09JL2001	11FE2003	1932.1102-012 2031C2 US	

#### U.S. PATENT APPLICATIONS Schedule B

Application Number	Filing Date	Attorney Docket Number	Client Reference Number
09/655,998	06SE2000	1932.1002-007	1011D1C2 US
09/708,828	08NO2000	1932.1003-020	1023D1C3 US
10/322,904	17DE2002	1932.1004-073	1031USD1C2
10/264,350	03OC2002	1932.1005-041	
10/081,022	21FE2002	1932.1019-015	118 USC2D1
10/374,014	25FE2003	1932.1019-016	
09/721,310	22NO2000	1932.1030-024	1291D1 US
09/721,291	22NO2000	1932.1030-025	1292D2 US
10/307,151	27NO2002	1932.1030-045	
09/714,327	16NO2000	1932.1031-020	1301D1 US
09/714,541	16NO2000	1932.1031-021	1302D2 US
10/359,458	02FE2003	1932.1031.023	1302USD3
09/891,720	26JE2001	1932.1033-016	1320USC2C1
10/324,623	19DE2002	1932.1037-016	
09/286,341	05AP1999	1932.1041-018	1401 US
08/964,498	22DE1999	1932.1043-000	1420 US
10/158,207	29MY2002	1932.1062-021	4631USC1
10/025,184	19DE2001	1932.1064-033	165
10/125,702	17AP2002	1932.1072-003	1731US
10/295,019	14NO2002	1932.1102-031	2031C2 US
09/847,053	01MY2001	1932.1104-003	2051US
10/051,766	17JA2002	1932.1110-001	
10/051,765	17JA2002	1932.1110-002	2111 US
09/691,429	18OC2000	1932.2005-002	148.2 US
09/875,275	06JE2001	1932.2005-010	1482US

@PFDesktop\::ODMA/MHODMA/iManage;371740;1

Application Number	Filing Date	Attorney Docket Number	Client Reference Number
10/187,316	27JE2002	1932.2019-002	3012US
10/327,627	20DE2002	1932.2029-002	
09/877,723	08JE2001	1932.2032-001	316.1US
09/610,246	06JL2000	1932.2045-001	
10/125,684	17AP2002	1932.2061-004	3511US
10/125,793	17AP2002	1932.2075-003	3650
10/125,780	17AP2002	1932.2076-003	3661US
10/187,397	27JE2002	1932.2084-002	
10/125,701	17AP2002	1932.2088-006	3821US
10/125,685	17AP2002	1932.2089-003	3841US
10/187,315	27JE2002	1932.2095-001	
10/374,014	25FE2003	1932.1019-016	118.0 C3
10/359,458	05FE2003	1932.1031-023	



FEDERAL IDENTIFICATION NO.06-1047163

Fee: \$250.00

## The Commonwealth of Massachusetts

#### William Francis Galvin

Secretary of the Commonwealth One Ashburton Place, Boston, Massachusetts 02108-1512 081

## ARTICLES OF MERGER OF PARENT AND SUBSIDIARY CORPORATIONS (General Laws, Chapter 156B, Section 82)

We,	Michael S. Wyzga		Sr., XXXXXXXX Vice President,
and	Peter Wirth		, *Clerk /X*************************
of	Genzyme Corporation	on	
		(Exact name of corporation)	,
organized ur	nder the laws of Massach	nusetts	and herein called the parent corporation,
certify as fol	lows:		
1. That the s	ubsidiary corporation(s) to	be merged into the parent corp	poration is/are:
	NAME	STATE OF ORGANIZATION	DATE OF ORGANIZATION
	armaceuticals, Inc. 2720693		September 11, 2000

2. The parent corporation, at the date of the vote, owned not less than ninety percent (90%) of the outstanding shares of each class of stock of the subsidiary corporation or corporations with which it has voted to merge.

Item 3 below may be deleted if all the corporations are organized under the laws of Massachusetts and if General Laws, Chapter 156B is applicable to them.

\*Delete the inapplicable words. In case the parent corporation is organized under the laws of a state other than Massachusetts, these articles are to be signed by officers having corresponding powers and duties.



4. That at a meeting of the directors of the parent corporation, the following vote, pursuant to General Laws, Chapter 156B, Section 82, Subsection (a) was duly adopted:

#### Approval of the Merger of GelTex Pharmaceuticals, Inc.

VOTED: That the Company is hereby authorized to merge GelTex Pharmaceuticals.

Inc., a Massachusetts corporation, into the Company with the Company

being the surviving entity.

VOTED: That the merger is approved and declared to be advisable and in the best

interests of the Company.

VOTED: That upon adoption of this vote, the Company be, and hereby is,

authorized to consummate the transaction and the President of the Company be, and hereby is, authorized and directed to execute and deliver

any and all documents necessary to effect the merger on behalf of the

Company.

VOTED: That the merger shall be effective on the date that Articles of Merger are

filed with the Secretary of the Commonwealth of Massachusetts, provided that the President is authorized to specify a different effective date in the Articles of Merger which is not more than thirty (30) days after the

Articles of Merger are filed.

#### General Authorization Vote

VOTED:

That the proper officers of the Company are hereby authorized to execute and deliver such documents and take such other actions as they or any of them deem necessary or advisable to implement the transactions contemplated by the foregoing votes.

5. The effective date of the merger shall be the date approved and filed by the Secretary of effective date is desired, specify such date, which shall not be more than thirty days after the	the Commonwealth. If a <i>later</i> he date of filing:
April 1, 2003	
	·
Section 6 below may be deleted if the parent corporation is organized under the law	ws of Massachusetts.
AGENTAL STATES AND AGENTAL SECRETARIA SE AGENTA SE SANTON SE SANTO	KARTAKARAKARAKARAKARAKARAKARAKARAKARAKAR
SIGNED UNDER THE PENALTIES OF PERJURY, this 27th day of March	, 20 03
MIL MARIE	Sr. ,XHYXXXXXX Sr. ,XHYXXXXXXX Vice President,
	, *Clerk /XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

<sup>\*</sup>Delete the inapplicable words. In case the parent corporation is organized under the laws of a state other than Massachusetts, these articles are to be signed by officers having corresponding powers and duties.

05/01/0888

#### THE COMMONWEALTH OF MASSACHUSETTS

## ARTICLES OF MERGER OF PARENT AND SUBSIDIARY CORPORATIONS (General Laws, Chapter 156B, Section 82)

O3 APR . I PN 3:36 CORFORATION DIVISION

I hereby approve the within Articles of Merger of Parent and Subsidiar
Corporations and, the filing fee in the amount of \$ 250
having been paid, said articles are deemed to have been filed with methis day of

Effective date:

#### WILLIAM FRANCIS GALVIN

Secretary of the Commonwealth

## TO BE FILLED IN BY CORPORATION Contact information:

Genzyme	Cor	poration	- At	tention	:Karen	M. He:	ffernan
One Ken	dall	Square,	1400	Bldg.,	Legal	Depar	tment
Cambrid	ge, l	MA 02139			*		_
Telephone:	617-	-591–5612	2				
imail:	kar	en.heffe:	cnan@	genzyme	.com		
copy this i	Iling w	iil be availabl	e on-line	at www.si	tate.ma.us	/sec/cor	

A copy this filing will be available on-line at www.state.ma.us/sec/coronce the document is filed.